

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. BOX 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

CONFIRMATION NO. ATTORNEY DOCKET NO. FIRST NAMED INVENTOR FILING DATE 3300 APPLICATION NO. 9319S-000328 Tomoyuki Furuhata 02/07/2002 10/072,658 06/19/2003 EXAMINER 7590 27572 HARNESS, DICKEY & PIERCE, P.L.C. PIZARRO CRESPO, MARCOS D P.O. BOX 828 BLOOMFIELD HILLS, MI 48303 PAPER NUMBER ART UNIT 2814

2017

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary    Examiner   Art Unit   Art Uni			Application No.	Applicant(s)		
Period for Reply  A SHORTENDE STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  The MAILING DATE OF THIS COMMUNICATION.  The MAILING DATE OF THIS COMMUNICATION.  A SHORTENDE STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  The period for the reply as variable under the provisions of 31 CFR 1,105(a), bit is even, in order of 10 cm ray to available under the provisions of 31 CFR 1,105(a), bit is even, in order 51 CFR 1,005(a), bit is even, in order 51 CFR 1,0	• •	_		FURUHATA ET AL.		
Period for Reply   A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MALLING DATE OF THIS COMMUNICATION.   THE MALLING DATE OF THIS COMMUNICATION. The maintained by the provisions of 37 CFR 1.136(a). In or event, however, may a reply to timely flad standard with the provision of 37 CFR 1.136(b). In or event, however, may a reply to timely flad standard with the provision of 37 CFR 1.136(b). In or event, however, may a reply to timely flad standard with the provision of the provision of 37 CFR 1.136(b). In or event, however, may a reply to timely flad standard with the st		Office Action Summary		Art Unit		
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MALLING DATE OF THIS COMMUNICATION.  THE MALLING DATE OF THIS COMMUNICATION.  If the many the considered from my be seened of the core of the core of the communication of the commu			Marcos D. Pizarro-Crespo			
Period for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ③ MONTH(S) FROM THE MALING DATE OF THIS COMMUNICATION.  State of the communication of the communication of the communication.  It the period for reply replicate bear is less than thing of the communication.  If the period for reply replicate bear is less than they communication.  If the period for reply replicate bear is less than they communication.  If the period for reply replicate bear is less than they common above the continuous process of the period for reply will, by about one of the communication.  If the period for reply is specification to the period for reply will, by about one of the communication of the period for reply will, by about one of the communication of the c		The MAILING DATE of this communication app	pears on the cover sheet with the	correspondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 INCHARGE (NOTE).  THE MAILING DATE OF THIS COMMUNICATION.  THE MAILING DATE OF THIS COMMUNICATION.  If the period is work may be available under the provisions of 37 CFR 1.15(a). In on event, however, may a rapy be timely filled.  The state Stop (work) 15 from the mailing date of this communication.  If the period for reply is specified above is less than filling substance; privated with apply and vall agains 30 K (5) MONTH's term the mailing date of this communication.  If the period for reply is specified above is less than filling substance; privated with apply and vall agains 30 K (5) MONTH's term the mailing date of the communication.  If the period for reply is specified above is less than the mailing date of the communication, which is the mailing date of the communication.  This action is FINAL.  2b) This action is non-final.  3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  Disposition of Claims  4) Claim(s) 1-18 is/are pending in the application.  4) Of the above claim(s) 1-7 and 12-18 is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) is/are allowed.  7) Claim(s) is/are objected to.  8) Claim(s) 1-18 are subject to restriction and/or election requirement.  Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a  accepted or b  objected to by the Examiner.  11) The proposed drawing correction filed on is/are: a  accepted or b  objected to by the Examiner.  12) The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120  13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  2 Certified copies of the priority documents have been received in Application No.  2 Certified copies of the priority documents have been received in Institu						
This action is FINAL.   2b	A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(s) THE MAILING DATE OF THIS COMMUNICATION.  THE MAILING DATE OF THIS COMMUNICATION.  Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed  Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed  after SIX (6) MONTHS from the mailing date of this communication.  If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  If the period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
This action is FINAL.   2b	1)🖂	Responsive to communication(s) filed on 27	<u>May 2003</u> .			
closed in accordance with the practice distribution of Claims  4) ○ Claim(s) 1-18 is/are pending in the application.  4a) Of the above claim(s) 1-7 and 12-18 is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ○ Claim(s) 8-11 is/are rejected.  7) □ Claim(s) is/are objected to.  8) ○ Claim(s) 1-18 are subject to restriction and/or election requirement.  Application Papers  9) ○ The specification is objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) □ The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner.  If approved, corrected drawings are required in reply to this Office action.  12) □ The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120  13) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All b) □ Some * c) □ None of:  1.□ Certified copies of the priority documents have been received.  2.□ Certified copies of the priority documents have been received in Application No  * See the attached detailed Office action for a list of the certified copies not received.  14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  a) □ The translation of the foreign language provisional application has been received.  15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § \$ 120 and/or 121.  Attachment(s)  1) ○ Notice of References Clied (PTO-892)  1) ○ Notice of Informal Patent Application (PTO-152)	` <u> </u>	2h)⊠ T	his action is non-tinal.	prosecution as to the merits is		
4)	closed in accordance with the practice under 2x parts					
4a) Of the above claim(s) 1-7 and 12-18 is/are withdrawn from consideration.  5) □ Claim(s) is/are allowed.  6) ☒ Claim(s) 8-11 is/are rejected.  7) □ Claim(s) is/are objected to.  8) ☒ Claim(s) 1-18 are subject to restriction and/or election requirement.  Application Papers  9) ☒ The specification is objected to by the Examiner.  10) □ The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) □ The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner.  If approved, corrected drawings are required in reply to this Office action.  12) □ The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120  13) □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) □ All b) □ Some * c) □ None of:  1. □ Certified copies of the priority documents have been received in Application No  3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  1 □ Interview Summary (PTO-413) Paper No(s)  Notice of References Clied (PTO-892)  1 □ Notice of Informal Patent Application (PTO-152)	1 4157	Claim(s) 1-18 is/are pending in the application	on.			
5) ☐ Claim(s) is/are allowed. 6) ☑ Claim(s) <u>8-11</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☑ Claim(s) <u>1-18</u> are subject to restriction and/or election requirement. Application Papers 9) ☒ The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.  12) ☐ The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120  13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  a) ☐ The translation of the foreign language provisional application has been received.  2. ☐ Certified Cepters of the foreign language provisional application has been received.  3. ☐ Characteric References Cited (PTO-892)  1) ☑ Notice of References Cited (PTO-892)  1) ☐ Notice of References Cited (PTO-892)  1) ☐ Interview Summary (PTO-413) Paper No(s)	1,2	4a) Of the above claim(s) 1-7 and 12-18 is/ar	e withdrawn from consideration			
6)						
To Claim(s) is/are objected to.    8   Claim(s) is/are objected to restriction and/or election requirement.						
Application Papers  9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  Acknowledgment is made of a claim for domestic priority documents have been received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  Attachment(s)  All Interview Summary (PTO-413) Paper No(s)	7/[7	Claim(s) is/are objected to.				
Application Papers  9)	8)⊠	Claim(s) 1-18 are subject to restriction and/o	or election requirement.			
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted of b) ☐ objected to by the Dark Distriction of the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.  If approved, corrected drawings are required in reply to this Office action.  12) ☐ The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120  13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1 ☐ Certified copies of the priority documents have been received.  2 ☐ Certified copies of the priority documents have been received in Application No  3 ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  a) ☐ The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  1) ☑ Notice of References Cited (PTO-892)  5) ☐ Notice of Interview Summary (PTO-413) Paper No(s)	Application Papers					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted of b) ☐ objected to by the Dark Paper No(s).  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.  If approved, corrected drawings are required in reply to this Office action.  12) ☐ The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120  13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  1) ☐ Notice of References Cited (PTO-892)  1) ☐ Notice of References Cited (PTO-892)  1) ☐ Notice of Internation (PTO-413) Paper No(s)	— is alter to chicated to by the Examiner.					
Applicant may not request that any objection to the drawing specific to the drawing approved b) disapproved by the Examiner.  12) The proposed drawings are required in reply to this Office action.  12) The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120  13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  1) Notice of References Cited (PTO-892)  Notice of Informal Patent Application (PTO-152)	ic/are: a) accented of D)   objected to by the					
If approved, corrected drawings are required in reply to this office determined.  12) The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120  13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  Notice of References Cited (PTO-892)  1) Notice of References Cited (PTO-892)  5) Notice of Informal Patent Application (PTO-152)						
If approved, corrected drawings are required in reply to this office determined.  12) The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120  13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  a) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  Notice of References Cited (PTO-892)  1) Notice of References Cited (PTO-892)  5) Notice of Informal Patent Application (PTO-152)	The proposed drawing correction filed on is: a) approved by disapproved by					
Priority under 35 U.S.C. §§ 119 and 120  13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  a) ☐ The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  1) ☐ Notice of References Cited (PTO-892)  Notice of Informal Patent Application (PTO-152)	If approved, corrected drawings are required in reply to this Office detection					
13) Acknowledgment is made of a claim for foreign priority under 35 0.3.0. § 110(a) (b) 4 (c) 4 (c) 4 (c) 4 (c) 5 (c) 4 (c) 5 (c) 6			EXAMINITO.			
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  * See the attached detailed Office action for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  1) ☐ Notice of References Cited (PTO-892)  1) ☐ Notice of References Cited (PTO-892)  5) ☐ Notice of Informal Patent Application (PTO-152)	Priority under 35 U.S.C. §§ 119 and 120					
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents have been received.  2. ☐ Certified copies of the priority documents have been received in Application No  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage  application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  a) ☐ The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  4) ☐ Interview Summary (PTO-413) Paper No(s)  Notice of References Cited (PTO-892)  5) ☐ Notice of Informal Patent Application (PTO-152)	13)[	13) Acknowledgment is made of a claim for foreign priority under 35 0.3.3. § 110(a) (a)				
2. Certified copies of the priority documents have been received in Application Technology  3. Copies of the certified copies of the priority documents have been received in this National Stage  application from the International Bureau (PCT Rule 17.2(a)).  *See the attached detailed Office action for a list of the certified copies not received.  14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  14) The translation of the foreign language provisional application has been received.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  1) Notice of References Cited (PTO-892)  1) Notice of References Cited (PTO-892)  1) Notice of Informal Patent Application (PTO-152)		NOT All INCT Some * c) None of:				
2. ☐ Certified copies of the priority documents have been received in Application Technology  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage  application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  1) ☐ Notice of References Cited (PTO-892)  1) ☐ Notice of References Cited (PTO-892)  1) ☐ Notice of Informal Patent Application (PTO-152)		The state of the priority documents have been received.				
3. ☐ Copies of the certified copies of the priority documents have been received application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  * See the attached detailed Office action for a list of the certified copies not received.  14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  * The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  * Attachment(s)  1) ☐ Notice of References Cited (PTO-892)  * Interview Summary (PTO-413) Paper No(s). ☐  * Only Provided References Cited (PTO-948)  * Only Provided References Cited (PTO-152)		At he priority documents have been received in Application 118.				
14) ☐ Acknowledgment is made of a claim for domestic priority under 35 0.3.6. § 110(a) (to 3)  a) ☐ The translation of the foreign language provisional application has been received.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  16) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  16) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  17) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  18) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  19) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  19) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  20) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  21) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  22) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		3. Copies of the certified copies of the priority documents have been received in an analysis of the certified copies at the certified copies not received.				
a) The translation of the foreign language provisional application has been also also and a complete the second of the foreign language provisional application has been also also and a complete the second of the foreign language provisional application has been also and/or 121.  15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  Attachment(s)  1) Notice of References Cited (PTO-892)  1) Notice of References Cited (PTO-892)  1) Notice of Informal Patent Application (PTO-152)	4.45	a Legislation of a claim for domestic priority under 35 0.3.0. 9 110(0) (to a p				
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413) Paper No(s)  5) Notice of Informal Patent Application (PTO-152)						
1) Notice of References Cited (PTO-892)  Notice of Informal Patent Application (PTO-152)  Notice of Informal Patent Application (PTO-152)	i					
3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0) 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1) 🛛 !		(8) 5) Notice of Ir	Informal Patent Application (PTO-152)		

U.S. Patent and Trademark Office PTO-326 (Rev. 04-01)

Application/Control Number: 10/072,658 (Non-Final Rejection)

Art Unit: 2814

Attorney's Docket Number: 9319S-000328

Filing Date: 2/7/2002

Claimed Foreign Priority Date: 1/30/2002 (JP 2002-21025)

2/8/2001 (JP 2001-32069)

Applicant(s): Furuhata et al.

Examiner: Marcos D. Pizarro-Crespo

### **DETAILED ACTION**

This Office action responds to the election in paper no. 10 filed on 5/27/2003.

### Election/Restrictions

- Applicant's election without traverse of claims 8-11 in paper no. 10 is 1. acknowledged.
- Claims 1-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) 2. as being drawn to a nonelected species, there being no allowable generic or linking claim.

### Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which 3. papers have been placed of record in the file.

### Specification

The title of the invention is not descriptive. A new title is required that is clearly 4. indicative of the invention to which the claims are directed.

Page 2

Application/Control Number: 10/072,658 (Non-Final Rejection)

Art Unit: 2814

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

# Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Initially, and with respect to claim 11, note that a "product-by-process" claim is directed to the product per se, no matter how actually made. See In re Thorpe et al., 227 USPQ 964 (CAFC, 1985) and the related case law cited therein which makes it clear that it is the final product *per se* which must be determined in a "product by process" claim, and not the patentability of the process, and that, as here, an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. As stated in Thorpe,

even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. *In re Brown*, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972); *In re Pilkington*, 411 F.2d 1345, 1348, 162 USPQ 145, 147 (CCPA 1969); *Buono v. Yankee Maid Dress Corp.*, 77 F.2d 274, 279, 26 USPQ 57, 61 (2d. Cir. 1935).

Page 3

Page 4

Application/Control Number: 10/072,658 (Non-Final Rejection)

Art Unit: 2814

Note that Applicant has burden of proof in such cases, as the above case law makes clear.

- 8. Claims 8-11 are rejected under 35 U.S.C. § 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over Kim (GB 2305295).
- 9. Regarding claim 8, Kim shows (see, e.g., fig. 2) all aspects of the instant invention including a semiconductor device having a non-volatile memory transistor formed on a semiconductor layer 101, the device comprising an interdielectric layer provided over the semiconductor layer 101 and the transistor. The interdielectric layer includes an oxide film 121 provided as a lowermost layer and a layer containing nitride (not shown) provided on the oxide film 121.
- 10. Regarding claim 9, Kim shows that the oxide film **121** may have a thickness of 30-70 nm (see, *e.g.*, pp.6/II.15-20).
- 11. Regarding claim 11, Kim shows that the interdielectric layer includes an oxide film **121** (see, e.g., fig. 2).

As to the grounds of rejection under section 103(a), the method of forming the oxide film by reduced pressure CVD using TEOS, is an intermediate process step that does not affect the structure of the final device. See MPEP § 2113, which discusses the handling of "product by process" claims and recommends the alternative (§ 102 / § 103) grounds of rejection.

Application/Control Number: 10/072,658 (Non-Final Rejection) Page 5

Art Unit: 2814

#### Conclusion

12. Papers related to this application may be submitted directly to Art Unit 2814 by facsimile transmission. Papers should be faxed to Art Unit 2814 via the Art Unit 2814 Fax Center located in Crystal Plaza 4, room 3C23. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The Art Unit 2814 Fax Center number is (703) 308-7722 or -7724. The Art Unit 2814 Fax Center is to be used only for papers related to Art Unit 2814 applications.

- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcos D. Pizarro-Crespo at (703) 308-6558 and between the hours of 9:30 AM to 8:00 PM (Eastern Standard Time) Monday through Thursday or by e-mail via <a href="Marcos.Pizarro@uspto.gov">Marcos.Pizarro@uspto.gov</a>. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy, can be reached on (703) 308-4918.
- 14. Any inquiry of a general nature or relating to the status of this application should be directed to the **Group 2800 Receptionist** at **(703) 308-0956**.

.

Application/Control Number: 10/072,658 (Non-Final Rejection)

Art Unit: 2814

15. The following list is the Examiner's field of search for the present Office Action:

F	eld of Search	Date
U.S. Class / Subclass(es)	: 257/632-651,758-760	6/5/2003
Other Documentation:	PLUS Analysis	6/5/2003
Electronic Database(s):	EAST (USPAT, EPO, JPO, PGPub)	6/5/2003

SUPERMICORY PRIMARY EMMINIOR TECHNOLOGY CENTER 2000

Marcos D. Pizarro-Crespo

Patent Examiner
Art Unit 2814
703-308-6558
marcos.pizarro@uspto.gov

MDP/mdp June 5, 2003